3. CARIS PHASE 2

3. Phase 2 of Economic Transmission Project Evaluation (ETPE)

If a Developer proposes a Regulated Economic Transmission Project (RETP) to address constraint(s) on the CARIS BPTFs identified in the Economic Planning Process, then the NYISO: (i) will process commences as soon as practicable following the approval of the CARIS Phase 1 that project proposal in an Economic Transmission Project Evaluation in accordance with the relevant provisions set forth in Sections 31.3.2, 31.5.1, 31.5.4, and 31.5.6 of Attachment Y of the NYISO OATT and this Manual and (ii) may provide benefit/cost analysis and other analysis of potential generic solutions to the congestion identified. The process for a Developer to propose a Regulated Economic Transmission Project is voluntary. For purposes of the ETPE, the NYISO will use the most recent System & Resource Outlook database and report approved by the NYISO Board of Directors and the Public Information Session. Its intent. The purpose of the ETPE is to process specific transmission projects that for which Developers are seeking cost recovery to allocate and recover their projects cost through the NYISO tariffOATT as regulated economic transmission projects. This requiresRegulated Economic Transmission Projects.

To perform the ETPE, the NYISO may need to update and extend the Base Casebase case database to be utilized in the production cost modeling and associated evaluation of projects. Itany proposed Regulated Economic Transmission Projects. The ETPE establishes the requirements by which the NYISO will first determine whether a proposed Regulated Economic Transmission Project is eligible for consideration by beneficiaries for cost allocation and recovery under the NYISO OATT. The ETPE also providesestablishes the requirements for the determination of beneficiaries, the assignment of voting shares, and the procedures by which the beneficiaries will vote on whether to approve the project as a regulated transmission projecta proposed Regulated Economic Transmission Project for purposes of allocating and recovering its cost under the NYISO OATT For an Interregional Transmission Project, the NYISO will jointly evaluate the project proposal with the relevant adjacent transmission planning region(s) in accordance with Section 7.3 of the Interregional Planning Protocol.

3.1. Phase 2Economic Transmission Project Evaluation Base Case Development

This procedure describes the methodology to be used to develop the set of databases required for the NYISO to evaluate a regulated economic transmission project that seeks cost recovery pursuant to Section 31.5.4 in Attachment Y of the OATT. The assumption matrix parameters for the NYCA system will be extended for ten (10) additional years beyond the CSPP study period (Years 11-20) using the methodologies described below as governed by Attachment Y of the OATT, Section 31.5.3.3.1.

The NYISO will develop the base case to be used in the ETPE to evaluate a Regulated Economic Transmission Project that seeks cost allocation and recovery in accordance with this Section 3.1 of the Manual.

The NYISO will evaluate the benefits and costs of each ~~regulated economic transmission project~~Regulated Economic Transmission Project over the first ten years from the proposed commercial operation date for that project. The most recently approved ~~CARIS Phase 1 databases~~Economic Planning base case and assumption matrix will be used as the starting point for developing the databases necessary to conduct this evaluation. Certain parameters of the ~~CARIS Phase 1~~System & Resource Outlook databases and assumption matrix will be updated as agreed by the NYISO, upon consultation with ESPWG, to, for example, ensure the determination of the benefits of a ~~regulated economic transmission project is based on current information. In order to accommodate the maximum required time period to be studied for a proposed project, the NYISO will extend the updated set of CARIS Phase 1 databases in conjunction with the ESPWG for an additional ten years~~Regulated Economic Transmission Project is based on current information.

The ~~creation of~~NYISO will update the database ~~for analyzing~~ to analyze specific ~~projects~~Regulated Economic Transmission Projects as part of the ~~CARIS Phase 2 cycle will follow the steps noted below~~Economic Transmission Project Evaluation as follows:

- ~~Prepare assumption matrix for ESPWG review and comment.~~
- ~~Update~~The NYISO will update the assumption parameters used in the ~~CARIS Phase 1 databases for years 1-10 as described~~base case of the System & Resource Outlook in accordance with Section 2.1.3~~.1.1.1 below.~~ of this Manual
- ~~Extend~~ The NYISO will present the changes for the updated databases ~~for years 11 through 20 as described in Section 3.1.1.2 below.~~
- ~~Present the changes for both the updated and the extended databases~~ to ESPWG for review~~,~~ and comment.
- ~~Upon completion of the ESPWG review, the Phase 2 base case will be presented to BIC for discussion and conceptual approval.~~

The same set of updated ~~and extended~~ databases will be used to analyze all proposed projects submitted within the same ~~CARIS Phase 2~~Economic Planning Process cycle. The NYISO will not change or modify the set of updated ~~and extended~~ databases to be used for the ~~Phase 2~~Economic Transmission Project Evaluation base case, except that the NYISO may modify the updated ~~and extended~~ databases when performing additional scenario analyses. The developer of the ~~regulated economic transmission project~~Regulated Economic Transmission Project being analyzed will not be able to modify the updated ~~and extended~~ database that has been presented by the NYISO to the ESPWG ~~and BIC.~~.

3.1.1. CARIS Phase 2 Assumption Matrix

Each parameter included in the CARIS Phase 1 assumption matrix will be updated or extended depending on their classification into one of the following categories (See Appendix A for full list of assumption parameters):

- Trajectory Based (e.g., load forecasts and fuel forecasts)
- Discrete System Changes (e.g., installations and retirements)
- Fixed Parameters (e.g., EFORd , heat rates, and emission rates)
- Operating Rules/Criteria
- Calculated Value (e.g., transfer limits and nomograms)
- Factors impacting additional benefit metrics calculations listed in Attachment Y, Section 31.5.3.3.6 and other post processing requirements (e.g., TCC ownership, bilaterals, discount rates, emissions levels and costs)
- Other (e.g., long term contracts and program updates).

3.1.1.1. Parameter Modifications

The following CARIS Phase 1 assumption matrix parameters (Years 1-10) will be updated for the CARIS Phase 2 study:

3.1.1.1.1. Trajectory Based

- NYCA Load Forecast- based on the most recently NYISO issued Load and Capacity Data Report.
- External Areas Load Forecast- based on most recent publicly available data adopted by the external area.
- Fuel Forecast- based on the most current publicly available data. The fuel forecast for both NYCA and the external control areas will be updated.

3.1.1.1.2. Discrete System Changes

- Update the proposed in-service date for all new projects included in the database pursuant to the latest status report submitted by developers.
- Remove projects that have withdrawn from the NYISO queue.
- Add new projects to the database that meet the Reliability Needs Assessment inclusion rules as described in Section 3.1 of the Reliability Planning Process Manual
- Remove retired units and publicly announced scheduled retirements.
- Include any changes to external control areas that are expected to significantly impact NYCA congestion.
- Resource adequacy and transmission security Reliability Needs, as identified in the latest Reliability Planning Process base case and updated in accordance with NYISO procedures, will be addressed through market-based solutions, regulated backstop solutions, and/or generic generation capacity additions, in the order listed. Generic generators will be modeled using representative data provided in the most recent NYISO Installed Capacity Demand Curve report.

~~3.1.1.1.3. Operating Rules and Criteria~~

- ~~Incorporate any operating rules or criteria that have been implemented since the completion of CARIS Phase 1.~~

~~3.1.1.1.4. Calculated Values~~

- ~~Parameters will be revised that are significantly impacted due to the updated changes noted above in Items IV.A 1 through 3.~~

~~3.1.1.1.5. Factors Impacting Additional Benefit Metrics~~

- ~~Incorporate any changes that have occurred since the completion of CARIS Phase 1.~~

~~3.1.1.2. Data Extension~~

~~The representation of external control areas will be fixed at year ten of CARIS Phase 1 Typical imports/exports between NYISO and its neighboring control areas will be maintained throughout the study period by adjustments to hurdle rates and area average heat rates.~~

~~3.1.1.2.1. Trajectory Based~~

- ~~Parameters will be extended utilizing relevant Gold Book load forecasts and consistent forecast procedures as used for the most recent CRP and CARIS Phase 1.~~
- ~~If the data necessary to implement the required forecast procedure used for the most recent CRP and CARIS Phase 1 is not available for a portion of the database extension period, the NYISO will employ an escalation rate developed in conjunction with ESPWG.~~

~~3.1.1.2.2. Discrete System Changes~~

- ~~Add new projects to the database that meet the Reliability Needs Assessment inclusion rules as described in Section 3.1 of the Reliability Planning Process Manual.~~
- ~~Remove retired units and publicly announced scheduled retirements.~~
- ~~Transfer limits calculated for year ten of the CARIS Phase 1 database(s) will be maintained.~~
- ~~Generic generation additions added to meet applicable Reliability Needs through the horizon year of the most recent Reliability Planning Process Study Period (year 10), as identified in Section 3.1.1.1.2, will remain in-service and maintained at a static level for the remaining years of the CARIS Phase 2 20-year study period. For years beyond those evaluated in the most recent Reliability Planning Process Study Period, no additional Reliability Needs will be identified, evaluated or addressed in the economic planning process.~~
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~~3.1.1.2.3. Fixed Parameters~~

- ~~Fixed at the year ten value in the CARIS Phase 1 databases.~~

~~3.1.1.2.4. Operating Rules/Criteria~~

- ~~Carry forward any rules/criteria changes implemented in the Year 1-10 update. However, parameters will not be extended beyond their expiration dates.~~

~~3.1.1.2.5. Calculated Values~~

- ~~Fixed at the year ten value in the CARIS Phase 1 databases.~~

~~3.1.1.2.6. Factors Impacting Additional Benefit Metrics~~

- ~~Carry forward any changes implemented in the Year 1-10 update. However, parameters will not be extended beyond their expiration dates.~~

~~3.1.1.2.7. Other~~

- ~~Fixed at the year ten value in the CARIS Phase 1 databases or as appropriate depending on the parameter type~~

~~3.1.1.3.~~3.1.1. ~~Phase 2~~Economic Transmission Project Evaluation Base Case Database Review

The NYISO will update ESPWG on the changes incorporated to complete the update of ~~Years 1-10 of the CARIS database(s) as well as the assumptions and changes to extend the database for Years 11-20.~~ the Regulated Economic Transmission Project database(s). The NYISO will post such modeling changes and assumptions on its website. ~~Upon completion of the ESPWG review and comment, the Phase 2 base case will be presented to BIC for discussion and conceptual approval. Following action at the BIC, the Phase 2~~Following review and comment at ESPWG, the Economic Transmission Project Evaluation base case will be deemed locked-down for the ~~CARIS 2 cycle~~Economic Planning Process cycle, until the next Outlook database has been approved. However, the developer may elect to study alternate assumptions, as scenarios, in analyzing the benefits of specific proposed projects, for informational purposes.

3.2. Developer Qualifications

A Developer must ~~be qualified pursuant to this section~~satisfy the Developer qualification requirements set forth in ~~order~~Section 31.3.2.2 of Attachment Y of the OATT to be eligible to propose a ~~regulated economic transmission project.~~Regulated Economic Transmission Project. The NYISO must determine the qualifications of a Developer intending to propose a ~~regulated economic transmission project~~Regulated Economic Transmission Project and to use the cost allocation and cost recovery mechanism in the ISO OATT. A Developer seeking to be qualified by the NYISO must submit to the NYISO Developer Qualification Mailbox (DeveloperQualification@NYISO.com) the qualification information described in Section 31.3.2.~~4.1~~2 of Attachment Y, as set forth in the NYISO Developer Qualification Form in Attachment A of ~~this~~the Reliability Planning Process Manual and all other related correspondence.

~~A Developer may submit its qualification information at any time. NYISO will notify the Developer of its qualification status within 30 days of receiving all the required information. If the NYISO determines that the Developer is qualified, the Developer can maintain its qualified status for a period of three years by annually submitting to the NYISO its most recent audited financial statement, and informing the NYISO of any material change to information previously provided The NYISO may revoke the status at any time if it determines that there has been a material change in the Developer's qualifications and the Developer no~~

~~longer meets the qualification requirement.~~

~~A Qualified Developer in any one of the Economic Transmission Planning, Reliability Planning and Public Policy Transmission Planning Processes is eligible to propose transmission-only projects for all of these Processes.~~

3.3. Project Eligibility

In order for a proposed ~~project~~Regulated Economic Transmission Project to be eligible for a vote by the project beneficiaries, ~~it~~the NYISO must ~~meet~~determine that it meets two benefit-cost criteria; the first pertaining to NYCA-wide production cost savings and the second pertaining to the zonal load cost reductions.

3.3.1. Project Costs

The project costs for a Regulated Economic Transmission Project are supplied by the Developer~~.~~ in accordance with Section 31.3.2.3 of Attachment Y of the OATT and Section 3.4.3.3 of this Manual.

The parameters used in cost allocation will follow the parameters applicable to cost recovery of a project pursuant to a regulated rate. That is, if an applicable formula rate has been filed with FERC, the parameters utilized in the formula rate such as the amortization period should be utilized in the NYISO's cost benefit calculation. Likewise, if there is no formula rate on file with FERC, the ~~developer~~Developer will provide the project-specific parameters to be used for the cost allocation analysis.

Once the cost benefit analysis is completed, the amortization period and other parameters used for cost allocation for the project should not be changed, unless so ordered by ~~the Commission~~FERC or a court of applicable jurisdiction, for cost recovery purposes to ensure the continued validity of the cost benefit analysis.

3.3.2. Project Eligibility –NYCA Wide Production Cost Savings

The NYISO will develop the first benefit/cost ratio ~~will be developed~~ by evaluating the NYCA-wide production cost savings for the first ten-years of the ~~project~~Regulated Economic Transmission Project, beginning with the first year of the project's proposed Commercial Operation (CO) date. The specific benefit metric is the present value of the ten-year difference in the NYCA-wide production cost with and without the project installed. The project costs are those supplied by the Developer with the total project cost utilized in the benefit/cost ratio equal to the present value of the total annual revenue requirement for the first ten years of the project beginning with the project's proposed CO date.

Specifically, the NYCA-wide production cost savings are calculated using the following formula:

NYCA-wide Production Cost Savings = NYCA Generator Production Cost Savings –

$$\sum\sum[(Import/Export\ Flow)_{Solution} - (Import/Export\ Flow)_{Base}] \times ProxyLMP_{Solution}$$

Where:

$ProxyLMP_{Solution}$ is the LMP at one of the external proxy buses;

$(Import/Export\ Flow)_{Solution} - (Import/Export\ Flow)_{Base}$ represents incremental imports/exports with respect to one of the external systems; and the summations are made for each external area and all simulated hours

3.3.3. Project Eligibility – Zonal Load Cost Savings

The NYISO will develop the second benefit/cost ratio ~~will be developed~~ by evaluating the zonal load cost savings for the first ten-years of the ~~project~~Regulated Economic Transmission Project, beginning with the first year of the project's proposed Commercial Operation (CO) date. The specific benefit metric is the present value of the ten-year difference in the net zonal LBMP load costs with and without the project installed. These LBMP load costs are net of any reduction in TCC payments and any bilateral contracts. The project costs are those supplied by the Developer with the total project cost utilized in the benefit/cost ratio equal to the present value of the total annual revenue requirement for the first ten years of the project beginning with the project's proposed CO date. If the sum of the zonal LBMP load cost savings (for those zones with a positive savings) is in excess of the project costs, then the NYISO will develop the zonal cost allocation information to inform the beneficiary voting.

~~As presented in Section 31.5.3.4.2.5.4 of Attachment Y, the~~The adjusted LBMP savings for each Load Zone is calculated as ~~follows:~~presented in Section 31.5.4.4.2.5.4 of Attachment Y.

~~$AdjLBMPS_{y,z}$, the adjusted LBMP savings for each Load Zone z in each year y, shall be calculated using the following equation:~~

$$AdjLBMPS_{y,z} = \max\left[0, TL_{y,z} - \sum_{b \in B_{y,z}}\left(BCL_{b,y,z} \cdot \left(1 - Ind_{b,y,z}\right)\right) - SG_{y,z}\right] \cdot \left(LBMP1_{y,z} - LBMP2_{y,z}\right),$$

~~***Where:***~~

~~$TL_{y,z}$ is the total annual amount of Energy forecasted to be consumed by Load in year *y* in Load Zone *z*;~~

~~$B_{y,z}$ is the set of blocks of Energy to serve Load in Load Zone z in year y that are sold under bilateral contracts for which information has been provided to the ISO that meets the requirements set forth elsewhere in this Section 31.45.3.4.2.5;~~

~~***$BCL_{b,y,z}$*** is the total annual amount of Energy sold into Load Zone z in year y under bilateral contract block b;~~

~~***$Ind_{b,y,z}$*** is the ratio of (1) the increase in the amount paid by the purchaser of Energy, under bilateral contract block *b*, as a result of an increase in the LBMP in Load Zone *z* in year *y* to (2) the increase in the amount that a purchaser of that amount of Energy would pay if the purchaser paid the LBMP for that Load Zone in that year for all of that Energy (this ratio shall be zero for any bilateral contract block of Energy that is sold at a fixed price or for which the cost of Energy purchased under that contract otherwise insensitive to the LBMP in Load Zone *z* in year *y*);~~

~~***$SG_{y,z}$*** is the total annual amount of Energy in Load Zone z that is forecasted to be served by LSE-owned generation in that Zone in year y;~~

~~***$LBMP1_{y,z}$*** is the forecasted annual load-weighted average LBMP for Load Zone z in year y, calculated under the assumption that the project is not in place; and~~

~~***$LBMP2_{y,z}$*** is the forecasted annual load-weighted average LBMP for Load Zone z in year y, calculated under the assumption that the project is in place.~~

~~***NZS_z*** the Net Zonal Savings for each Load Zone *z* resulting from a given project, shall be calculated using the following equation:~~

$$NZS_z = \max\left[0, \sum_{y=PS}^{PS+9}\left(\left(AdjLBMPS_{y,z} - TCCRevImpact_{y,z}\right)\cdot DF_y\right)\right],$$

~~***Where:***~~

~~***PS*** is the year in which the project is expected to enter commercial operation;~~

~~***$AdjLBMPS_{y,z}$*** is as calculated in Section 31.45.3.4.2.5;~~

~~***$TCCRevImpact_{y,z}$*** is the forecasted impact of TCC revenues allocated to Load Zone *z* in year *y*, calculated using the procedure described in Appendix B in Section 31.6 of this Attachment Y; and~~

~~***DF_y*** is the discount factor applied to cash flows in year *y* to determine the present value of that cash flow in year *PS*.~~

~~3.4. Cost Allocation for Regulated Economic Transmission Projects~~

3.4. ~~This section describes the process to identify the beneficiaries and cost allocation for Regulated Economic Transmission Projects. Project~~ Eligibility and Cost Allocation for Regulated Economic Transmission Projects ~~is~~

The eligibility and cost allocation requirements for Regulated Economic Transmission Projects are described in Sections 31.5.~~3~~4.3 and 31.5.~~3~~.4 ~~found in~~.4 of Attachment Y to the OATT~~. Sections 31.5.3.3~~ and ~~31.5.~~this Section 3.4 of the Manual. The cost allocation process described in this ~~section~~Section 3.4 of the Manual is strictly for the purpose of determining the allocation of LSE voting shares utilized in the voting procedures described in ~~section~~Section 3.~~3~~4.5 of this Manual below.

All benefits, expressed in this instance as net zonal LBMP cost savings, are denoted in present value terms over the first ten years of the ~~project's~~Regulated Economic Transmission Project's operation, i.e., ten years from the projects proposed CO date. Zones with a zonal benefit less than 0 are excluded from the cost

allocation process. Costs are allocated to the Zones with positive benefit based on the ratio of the individual Zone's benefit to the sum of positive zonal benefits. Zonal costs are allocated to the individual LSEs within the zones based on the ratio of each LSE's zonal MWh (for the most twelve-month period for which actual metered data is available) to the total zonal MWh.

3.4.1. Methodology to Adjust the LBMP Load Costs for Bilateral Contracts and LSE-Owned Generation

The LBMP load cost values utilized in the Zonal Benefit Metric are adjusted to account for the presence of bilateral contracts and LSE-owned generation, which could for specific Load Serving Entities reduce the impact of the project on the cost of their energy purchases. The methodology to adjust the LBMP Load Cost savings for bilateral contracts and self-generation for purposes of identifying project beneficiaries is provided in Section 31.5.4.~~3~~.4.2.5.4 in Attachment Y to the OATT.

3.4.2. Methodology to Estimate the TCC Revenue Changes That Would Result From a Proposed Regulated Economic Transmission Project

The methodology to estimate the TCC revenue changes that would result from a proposed ~~project~~Regulated Economic Transmission Project is provided in Section 31.5.~~3~~4.4.2.3 in Attachment Y to the OATT ~~and as further set forth in Appendix B of this manual~~.

3.4.2.1. Forecasting the Net Reductions in TCC Revenues Resulting from a Proposed Regulated Economic Transmission Project

For the purpose of determining the allocation of costs associated with a proposed ~~project~~Regulated Economic Transmission Project as described in Section 31.5.~~3~~4.4.2.3 of Attachment Y, the ISO shall use the procedure described herein to forecast the net reductions in TCC revenues allocated to Load in each Load Zone as a result of a proposed project.

3.4.2.1.1. Definitions

The following definitions will apply to this procedure:

Pre-~~CARIS~~Outlook Centralized TCC Auction: The last Centralized TCC Auction that had been completed as of the lock down date the input assumptions ~~were determined~~ for the ~~CARIS~~Outlook in which the Regulated Economic Transmission Project was identified as a candidate for development under the provisions of this Attachment Y.

Project: The proposed ~~transmission project~~Regulated Economic Transmission Project for which the evaluation of the net benefits forecasted for Load in each Load Zone, as described in Section 31.5.~~3~~4.4.2 of this Attachment Y, is being performed.

TCC Revenue Factor: A factor that is intended to reflect the expected ratio of (1) revenue realized in the

TCC auction from the sale of a TCC to (2) the Congestion Rents that a purchaser of that TCC would expect to realize. The value to be used for the TCC Revenue Factor shall be stated in the ISO Procedures.

3.4.2.1.2. Steps 1 through 6 of the Procedure

For each Project, the ~~ISO~~NYISO will perform Steps 1 through 6 of this procedure twice for each of the ten (10) years following the proposed commercial operation date of the Project: once under the assumption that the Project is in place in each of those years, and once under the assumption that the Project is not in place in each of those years.

3.4.2.1.2.1. Forecasting the Value of Grandfathered Rights, Grandfathered TCCs, Incremental TCCs and TCC Auction Revenue

Step 1. The ~~ISO~~NYISO shall forecast Congestion Rents collected on the New York electricity system in each year, which shall be equal to:

a. the product of:

(i) the forecasted Congestion Component of the Day-Ahead LBMP for each hour at each Load Zone or Proxy Generator Bus and

(ii) forecasted withdrawals scheduled in that hour in that Load Zone or Proxy Generator bus, summed over all locations and over all hours in that year, minus:

b. the product of:

(i) the forecasted Congestion Component of the Day-Ahead LBMP for each hour at each Generator bus or Proxy Generator Bus and

(ii) forecasted injections scheduled in that hour at that Generator bus or Proxy Generator Bus, summed over all locations and over all hours in that year.

Step 2. The ~~ISO~~NYISO shall forecast:

a. payments in each year associated with any Incremental TCCs that the ISO projects would be awarded in conjunction with that Project (which will be zero for the calculation that is performed under the assumption that the Project is not in place);

b. payments in each year associated with any Incremental TCCs that the ~~ISO~~NYISO has awarded, or that the ~~ISO~~NYISO projects it would award, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation; and

c. payments that would be made to holders of Grandfathered Rights and imputed payments that would be made to the Primary Holders of Grandfathered TCCs that would be in effect in each year, under the following assumptions:

(i) all Grandfathered Rights and Grandfathered TCCs expire at their stated expiration dates;

(ii) imputed payments to holders of Grandfathered Rights are equal to the payments that would be made to the Primary Holder of a TCC with the same Point of Injection and Point of Withdrawal as that Grandfathered Right; and

(iii) in cases where a Grandfathered TCC is listed in Table 1 of Attachment M to the OATT, the number of those TCCs held by their Primary Holders shall be set to the number of such TCCs remaining at the conclusion of the ETCNL reduction procedure conducted before the Pre-~~CARIS~~Outlook Centralized TCC Auction.

Step 3. The ~~ISO~~NYISO shall forecast TCC auction revenues for each year by subtracting:

a. the forecasted payments calculated for that year in Steps 2(a), 2(b) and 2(c) of this procedure

from:

b. the forecasted Congestion Rents calculated for that year in Step 1 of this procedure,

and multiplying the difference by the TCC Revenue Factor.

3.4.2.1.2.2. Forecasting the Allocation of TCC Auction Revenues Among the Transmission Owners

Step 4. The ~~ISO~~NYISO shall forecast the following:

a. payments in each year to the Primary Holders of Original Residual TCCs and
b. payments in each year to the Primary Holders of TCCs that correspond to the amount of ETCNL remaining at the conclusion of the ETCNL reduction procedure conducted before the Pre-~~CARIS~~Outlook Centralized TCC Auction,

and multiply each by the TCC Revenue Factor to determine the forecasted payments to the Primary Holders of Original Residual TCCs and the Transmission Owners that have been allocated ETCNL.

Step 5. The ~~ISO~~NYISO shall forecast residual auction revenues for each year by subtracting:

a. the sum of the forecasted payments for each year to the Primary Holders of Original Residual TCCs and the Transmission Owners that have been allocated ETCNL, calculated in Step 4 of this procedure

from:

b. forecasted TCC auction revenues for that year calculated in Step 3 of this procedure.

Step 6. The ~~ISO~~NYISO shall forecast each Transmission Owner's share of residual auction revenue for each year by multiplying:

a. the forecast of residual auction revenue calculated in Step 5 of this procedure and
b. the ratio of:

(i) the amount of residual auction revenue allocated to that Transmission Owner in the Pre-CARIS Centralized TCC Auction to

(ii) the total amount of residual auction revenue allocated in the Pre-~~CARIS~~Outlook Centralized TCC Auction.

3.4.2.1.3. Steps 7 through 10 of the Procedure

The ISO will perform Steps 7 through 10 of this procedure once for each of the ten (10) years following the proposed commercial operation date of the Project, using the results of the preceding calculations performed both under the assumption that the Project is in place in each of those years, and under the assumption that the Project is not in place in each of those years.

3.4.2.1.3.1. Forecasting the Impact of the Project on TSC Offsets and the NTAC Offset

Step 7. The ~~ISO~~NYISO shall calculate the forecasted net impact of the Project on the TSC offset for each megawatt-hour of electricity consumed by Load in each Transmission District (other than the NYPA Transmission District) in each year by:

a. summing the following, each forecasted for that Transmission District for that year under the assumption that the Project is in place:

(i) forecasted Congestion Rents associated with any Incremental TCCs that the ~~ISO~~NYISO has awarded, or that the ~~ISO~~NYISO projects it would award, as calculated in Step 2(b) of this procedure, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation, if those Congestion Rents would affect the TSC for that Transmission District;

(ii) forecasted Congestion Rents associated with any Grandfathered TCCs and forecasted imputed Congestion Rents associated with any Grandfathered Rights held by the Transmission Owner serving that Transmission District that would be paid to that Transmission Owner for that year, as calculated in Step 2(c) of this procedure, if those Congestion Rents would affect the TSC for that Transmission District;

(iii) the payments that are forecasted to be made for that year to the Primary Holders of Original Residual TCCs and ETCNL that have been allocated to the Transmission Owner serving that Transmission District, as calculated in Step 4 of this procedure; and

(iv) that Transmission District's forecasted share of residual auction revenues for that year, as calculated in Step 6 of this procedure for the Transmission Owner serving that Transmission District;

b. subtracting the sum of items (i) through (iv) above, each forecasted for that Transmission District for that year under the assumption that the Project is not in place; and

c. dividing this difference by the amount of Load forecasted to be served in that Transmission District in that year, stated in terms of megawatt-hours, net of any Load served by municipally owned utilities that is not subject to the TSC.

Step 8. The ~~ISO~~NYISO shall calculate the forecasted net impact of the Project on the NTAC offset for each megawatt-hour of electricity consumed by Load in each year by:

a. summing the following, each forecasted for that year under the assumption that the Project is in place:

(i) forecasted Congestion Rents associated with any Incremental TCCs that the ISO has awarded, or that the ISO projects it would award, as calculated in Step 2(b) of this procedure, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation, if those Congestion Rents would affect the NTAC;

(ii) forecasted Congestion Rents associated with any Grandfathered TCCs and forecasted imputed Congestion Rents associated with any Grandfathered Rights held by NYPA that would be paid to NYPA would for that year, as calculated in Step 2(c) of this procedure, if those Congestion Rents would affect the NTAC;

(iii) the payments that are forecasted to be made for that year to NYPA in association with Original Residual TCCs allocated to NYPA, as calculated in Step 4 of this procedure; and

(iv) NYPA's forecasted share of residual auction revenues for that year, as calculated in Step 6 of this procedure;

b. subtracting the sum of items (i) through (iv) above, each forecasted for that year under the assumption that the Project is not in place; and

c. dividing this difference by the amount of Load expected to be served in the NYCA in that year, stated in terms of megawatt-hours, net of any Load served by municipally owned utilities that is not subject to the NTAC.

3.4.2.1.3.2. Forecasting the Net Impact of the Project on TCC Revenues Allocated to Load in Each Zone

Step 9. The ~~ISO~~NYISO shall calculate the forecasted net impact of the Project in each year in each Load Zone on payments made in conjunction with TCCs and Grandfathered Rights that benefit Load but which do not affect TSCs or the NTAC, which shall be the sum of:

a. Forecasted Congestion Rents paid or imputed to municipally owned utilities serving Load in that Load Zone that own Grandfathered Rights or Grandfathered TCCs that were not included in the calculation of the TSC offset in Step 7(a)(ii) of this procedure or the NTAC offset in Step 8(a)(ii) of this procedure, which the ISO shall calculate by:

   (i) summing forecasted Congestion Rents that any such municipally owned utilities serving Load in that Load Zone would be paid for that year in association with any such Grandfathered TCCs and any forecasted imputed Congestion Rents that such a municipally owned utility would be paid for that year in association with any such Grandfathered Rights, as calculated in Step 2(c) of this procedure under the assumption that the Project is in place; and

   (ii) subtracting forecasted Congestion Rents that any such municipally owned utilities would be paid for that year in association with any such Grandfathered TCCs, and any forecasted imputed Congestion Rents that such a municipally owned utility would be paid for that year in association with any such Grandfathered Rights, as calculated in Step 2(c) of this procedure under the assumption that the Project is not in place; and

b. Forecasted Congestion Rents collected from Incremental TCCs awarded in conjunction with projects that were previously funded through this procedure, if those Congestion Rents are used to reduce the amount that Load in that Load Zone must pay to fund such projects, which the ISO shall calculate by:

   (i) summing forecasted Congestion Rents that would be collected for that year in association with any such Incremental TCCs, as calculated in Step 2(b) of this procedure under the assumption that the Project is in place; and

   (ii) subtracting forecasted Congestion Rents that would be collected for that year in association with any such Incremental TCCs, as calculated in Step 2(b) of this procedure under the assumption that the Project is not in place.

Step 10. The ~~ISO~~NYISO shall calculate the forecasted net reductions in TCC revenues allocated to Load in each Load Zone as a result of a proposed Project by summing the following:

a. the product of:

   (i) the forecasted net impact of the Project on the TSC offset for each megawatt-hour of electricity consumed by Load, as calculated for each Transmission District (other than the NYPA Transmission District) in Step 7 of this procedure; and

   (ii) the number of megawatt-hours of energy that are forecasted to be consumed by Load in that year, in the portion of that Transmission District that is in that Load Zone, for Load that is subject to the TSC;

summed over all Transmission Districts;

b. the product of:

   (i) the forecasted net impact of the Project on the NTAC offset for each megawatt-hour of electricity consumed by Load, as calculated in Step 8 of this procedure; and

   (ii) the number of megawatt-hours of energy that are forecasted to be consumed by Load in that year in that Load Zone, for Load that is subject to the NTAC; and

c. the forecasted net impact of the Project on payments and imputed payments made in conjunction with TCCs and Grandfathered Rights that benefit Load but which do not affect TSCs or the NTAC, as calculated in Step 9 of this procedure.

3.4.2.1.4. Additional Notes Concerning the Procedure

- For the purposes of Steps 2(c) and 4(b) of this procedure, the NYISO will utilize the currently effective version of Attachment L to the OATT to identify Existing Transmission Agreements and Existing Transmission Capacity for Native Load.
- Each Transmission Owner, other than NYPA, will inform the NYISO of any Grandfathered Rights and Grandfathered TCCs it holds whose Congestion Rents should be taken into account in Step 7 of this procedure because those Congestion Rents affect its TSC.
- NYPA will inform the NYISO of any Grandfathered Rights and Grandfathered TCCs it holds whose Congestion Rents should be taken into account in Step 8 of this procedure because those Congestion Rents affect the NTAC.

3.4.2.1.4.1. Procedure for Setting TCC Revenue Factor

The TCC Revenue Factor will initially be set at 0.9. In the event that there is evidence that the ratio of the price for which a TCC sells in the Centralized TCC Auction to the Congestion Rents that the Primary Holder expects to receive from that TCC is generally significantly different from 0.9, the TCC Revenue Factor will be revised.

3.4.3. Procedure for Regulated Economic Transmission Projects - Specific Projects Submittals

~~This procedure describes~~A Developer seeking to propose a Regulated Economic Transmission Project for purposes of cost allocation and recovery under the NYISO OATT must satisfy the eligibility and informational requirements ~~for submitting to the NYISO for evaluation a regulated economic transmission project that seeks cost recovery pursuant to Section 31.~~set forth in this Section 3.4.3 of the Manual and Sections 31.3.2 and 31.5.4.3 of Attachment Y~~. This procedure~~ of the NYISO OATT. This Section 3.4.3 of the Manual does not apply to developers or any other interested parties requesting and funding the NYISO to conduct ~~additional congestion and resources integration studies~~Requested Economic Transmission Studies pursuant to Section 31.3.~~1.2.~~3 of Attachment Y. The requirements regarding ~~requesting additional congestion and resource integration studies~~Requested Economic Planning Studies are ~~provided in Section 4 of this manual. The rules governing specific regulated economic project submittals are provided~~described in ~~Sections 31.3.2.4 and 31.5.3.3 in Attachment Y to the OATT~~ Section 4 of this Manual.

3.4.3.1. Eligibility

~~Any developer of a regulated economic transmission project~~Any Developer that is proposing a Regulated Economic Transmission Project that will interconnect with or be integrated into the existing New York State Bulk Power Transmission Facilities~~, who~~ and that is seeking cost allocation and recovery ~~pursuant to Section 31.5.4 of Attachment Y,~~under the NYISO OATT may submit ~~such~~the proposed project

for an evaluation ~~pursuant to Section 31.5.3.3 of Attachment Y~~, of the project's benefits and costs over a ten-year period commencing with the commercial operation date ~~("Benefit/Cost Analysis"). A regulated economic transmission project~~pursuant to Section 31.5.4.3 of Attachment Y. A Regulated Economic Transmission Project may include the construction of a new line, rebuild or re-conductoring of an existing line and/or addition of transmission equipment (such as, but not limited to, static var compensators, phase angle regulators, capacitor banks, power transformers).

The ~~developer~~Developer is responsible for all reasonable actual costs incurred by the NYISO for the Benefit/Cost Analysis. Such costs may include the use by NYISO, at its discretion, of contractors/consultants and costs that Transmission Owners may incur to supply project-related data when requested to do so by the NYISO.

3.4.3.2. Timing of Requests for ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation of Regulated Economic Transmission Project

The NYISO shall, upon request and subject to resource limits, conduct ~~a Benefit/Cost Analysis~~an Economic Transmission Project Evaluation at any time during the current ~~CARIS~~Economic Planning Process cycle. The NYISO will accommodate all requests to the extent reasonable and practicable, subject to resource limitations. If the ~~developer~~Developer wishes to have its project voted on, pursuant to Section 31.5.~~3~~4.6 of Attachment Y, during the current ~~CARIS~~Economic Planning Process study cycle, then the ~~developer~~Developer must submit a complete ~~"Benefit /Cost Analysis~~a Request~~"~~ Form for Economic Transmission Project Evaluation of a Regulated Economic Transmission Project, which form is included in Appendix D to this Manual, and the required deposit to the NYISO.

~~3.4.3.3. Request for Benefit/Cost Analysis~~

3.4.3.3. Request for Economic Transmission Project Evaluation of a Regulated Economic Transmission Project

Each ~~Benefit/Cost Analysis Request~~request for an Economic Transmission Project Evaluation submitted to the NYISO (~~on a~~pursuant to the request form ~~developed by the NYISO~~in Appendix D of this Manual) shall be accompanied by a refundable deposit of $25,000. Such deposit shall be applied toward the reasonable actual costs incurred by the NYISO and its contractors/consultants, and by Transmission Owners supplying project-related data, including both labor and computing costs, in the performance of the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation.

The ~~developer~~Developer shall also submit to the NYISO a Project Conceptual Package ("PCP") ~~in~~with its ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation request form. A developer submitting multiple ~~Benefit/Cost Analysis~~ requests, must submit a separate PCP and separate deposit for each project. ~~The Benefit/Cost Analysis Request~~The Economic Transmission Project Evaluation request and the PCP

should be submitted to the NYISO via email titled "Economic Transmission Project Evaluation Request" utilizing the following e-mail address: ~~mailto:CARISSpecificProject~~EconomicPlanning@nyiso.com

~~The~~Figure 1 below indicates the type of information required in the PCP and how that information will be used ~~is included in Table 1.~~ This information ~~is required in order to serve~~will support the ~~needs~~requirements of the following three entities:

1. NYISO: In order to perform the ~~Benefit/Cost analysis~~Economic Transmission Project Evaluation
2. ESPWG: In order to determine scenarios that should be analyzed as part of the ~~Benefit/Cost~~ analysis
3. Benefiting LSE's: In order to have sufficient information to make an informed vote.

Figure 1: PCP Information Matrix

Project Conceptual Package Information	Required for NYISO to Perform Analysis	Required for ESPWG to Identify Scenarios	Required for ESPWG Review	Required for Benefiting LSEs to Vote
Developer's Contact Information	X	-		-
Project Description	X	X		X
Project Drawings	X	X		X
Project Capital Costs	X		X	X
Risk Profile	-	-		X
Annual Revenue Requirements	X	-		X
Developer's Business Information	-	-		X

The PCP shall include~~, but not be limited to,~~ the following:

1. Developer's Contact Information
   - Developer's Name and Title
   - Developer's Company Address
   - Developer's Telephone Number, Fax Number and E-mail
   - Address of the Developer's Contact Person.
2. Project Description

The ~~developer~~Developer will submit a written description of the ~~regulated economic transmission project~~Regulated Economic Transmission Project to NYISO, which will include, but not be limited to, the following:

- A description of how the project will interconnect with or be integrated into the existing New York State Bulk Power Transmission Facilities
- A description of the right of way to be used or acquired
- A description of the property that would need to be acquired or condemned for the project
- Transmission project construction type
- The thermal capacity and impedance ratings of the line
- The required substation and protection additions or modifications required including a list of major equipment and their ratings
- Description of project assumptions used for the basis of the Project Capital Costs and Annual Revenue Requirements
- A description of the project management team
- A project implementation plan
- A list of anticipated System Upgrade Facilities
- Status of the project in the NYISO's Interconnection Queue
- A list of all regulatory approvals required from state, federal and local licensing and environmental regulatory agencies, and a schedule for applications and expected regulatory approvals
- A major milestone schedule.

3. Project Drawings

The ~~developer~~Developer will submit the following drawings to the NYISO:

- Site plan
- System area one-line
- Detailed substation one-lines
- Substation plot plans
- Transmission route plan.

4. Project Capital Costs

The ~~developer~~Developer will submit detailed capital cost estimates for each segment of the project (e.g., each substation, protection/communication systems, transmission line, system upgrades and other interconnection costs to the extent identified, etc). The ~~developer~~Developer will also submit a quarterly cash flow from the start of the project until the Commercial Operation Date. A cost estimate breakdown will be provided that includes, at a minimum, the following items:

- Licensing/permitting
- Engineering
- Construction labor
- Major equipment
- Real estate acquisitions and rights of ways
- Overheads
- Contingencies.

5. Risk Profile

   As described in procedures on cost overruns, the developer will submit a risk profile. The risk profile will address, at a minimum, the following areas:

   - The stage of project development and the level of accuracy of the project cost estimate;
   - Required cost overruns sharing, if any, between the Developer and the LSEs benefiting from the project;
   - Required project cost increase sharing, if any, due to a force majeure between the Developer and the LSEs benefiting from the project;
   - Identification of conditions, if any, for canceling the project by the Developer including terms and conditions for allocating sunk costs and lost benefits.

   The Developer may submit multiple risk profiles for the project up to a maximum of three. The project and each of its risk profiles will be voted on individually by the LSE's benefiting from the project as if it was a separate project.

6. Annual Revenue Requirements for Years 1-30

   The ~~developer~~Developer will provide their Annual Revenue Requirements starting in the first year of the Commercial Operation Date and the subsequent 29 years. A list of assumptions used in calculating the Annual Revenue Requirements will be provided, which shall include but not be limited to:

   - Cost of capital
   - Annual operations and maintenance costs
   - Property Taxes
   - Escalation rate
   - Revenue rate of return.

7. Developer's Business Information

   - Development Experience
     - Provide a list of all transmission projects that have been under development or brought into-service during the past 5 years, and provide a list of other relevant development ~~-~~projects that are located in New York.
   - Pending Litigation
     - List all ongoing litigation and past lawsuits related to the developer's performance regarding the development projects listed above
   - Credit Worthiness
     - List current rating from at least three rating agencies.
   - Developer Size
     - List revenues for the last three years for the entity that is developing the project.
   - Technical Expertise
     - Provide names and experience of the key technical personnel assigned to the project.

8. Any other reasonably required information to aid NYISO in understanding the scope of the project and the developer's capabilities.

3.4.3.4. PCP Review and Scoping Meeting

The NYISO shall review the ~~developer's~~Developer's PCP to ensure its completeness and clear description of the project scope and costs and acknowledge receipt of the ~~Benefit/Cost Analysis~~

~~Request~~request form for the Economic Transmission Project Evaluation within ten (10) business days of receipt. If, in its sole discretion, the NYISO finds the PCP to be deficient in content, the NYISO will request the ~~developer~~Developer to provide the missing data. No analysis will be performed by NYISO until an acceptable PCP is received.

Following the receipt of a complete PCP and the required deposit, the NYISO will post the request on their website and establish with ~~developer~~Developer a mutually agreeable time for a scoping meeting ("Scoping Meeting") for the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation. The Scoping Meeting shall be used to address any questions regarding the project description to ensure that all the technical parameters needed by the NYISO to perform the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation are understood. The base case applicable to ~~economic projects~~the Regulated Economic Transmission Project seeking ~~tariff~~cost allocation and recovery will be established pursuant to the procedure to update ~~and extend~~ the database for specific project benefit cost analysis, pursuant to Section 3.1 of this Manual.

Following the Scoping Meeting, the NYISO will forward the information ~~identified in Table 1~~ to the ESPWG for review and determination of the scenarios to be analyzed for the proposed project. The ESPWG will have the opportunity to provide feedback to the Developer on the completeness of the submitted Project Capital Costs.

Following the ESPWG meeting, the NYISO will (i) ~~memorialize~~finalize the ~~results in writing~~scope as part of an agreement for ~~a Benefit/Cost Analysis (~~"an Economic Transmission Project ~~Analysis~~Evaluation (in the form of the "Economic Transmission Project Evaluation Agreement" ~~developed by the NYISO~~set forth in Appendix E of this Manual) and (ii) provide the ~~developer~~Developer with the Economic Transmission Project ~~Analysis~~Evaluation Agreement and a non-binding estimate of the total costs. The Economic Transmission Project ~~Analysis~~Evaluation Agreement will include the scope of work and will define the deliverables to be provided by the NYISO at the completion of the studies. The Economic Transmission Project ~~Analysis~~Evaluation Agreement will also contain payment terms and conditions. The Economic Transmission Project ~~Analysis~~Evaluation Agreement must be executed by the ~~developer~~Developer before the NYISO conducts any analysis.

If the NYISO determines that a material change occurs in the project for any reason, the NYISO may require the ~~developer~~Developer to pay an additional deposit to reflect that cost increase, which the NYISO shall also apply to the actual cost of the ~~Benefit/Cost Analysis.~~Economic Transmission Project Evaluation. No analysis will be performed by the NYISO on the revised project until the additional deposit is received and an agreed to revised target completion date is determined.

3.4.3.5. Completion and Delivery of Results

The NYISO will process the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation requests in the order in which they are received. ~~A Benefit/Cost Analysis Request~~A Economic Transmission Project Evaluation request will be deemed received by the NYISO on the date the NYISO receives an acceptable PCP and the required deposit. The NYISO will use reasonable efforts to complete each ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation by a date mutually agreed to with the ~~developer~~Developer. If the NYISO determines this target date will not be met, the NYISO will promptly inform the ~~developer~~Developer and provide the ~~developer~~Developer with an updated estimate of the new date by which the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation will be completed.

Upon completion of the analysis, the NYISO will provide the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation results to the ~~developer~~Developer. Upon request, the NYISO will schedule a meeting to review the results with the ~~developer~~Developer. The ~~developer~~Developer shall be responsible for all reasonable and actual costs incurred by the NYISO that result from the meeting to review the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation and from any requested modifications to the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation.

The NYISO will provide the "Final Invoice" to the ~~developer~~Developer to cover all reasonable costs the NYISO incurred in the performance of the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation that have not yet been paid by the developer.

3.4.3.6. Withdrawal of Request

The ~~developer~~Developer may withdraw its ~~Benefit/Cost Analysis Request~~Economic Transmission Project Evaluation at any time by written notice to the NYISO. Upon receipt of such request, the NYISO will immediately terminate any further work on the applicable ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation.

The ~~developer~~Developer shall reimburse the NYISO for all reasonable expenses incurred prior to the receipt of the withdrawal notice. The NYISO will refund any portion of the deposit that has not been used for the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation prior to receipt of the withdrawal notice to the developer, if applicable.

Following reimbursement (refund), the NYISO will forward the completed results, if any, of the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation work completed prior to the withdrawal date to the developer.

3.4.3.7. Disclosure of ~~Benefit/Cost~~Economic Transmission Project Evaluation Results

In the event that the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation finds that a project is eligible for cost allocation and recovery under Section 31.5.4 of Attachment Y (i.e., the benefit of the proposed project exceeds its cost measured over the first ten years from the proposed commercial operation date for the project, and the total capital cost of the project exceeds $25 million~~),),),~~ the ~~developer~~Developer may then seek acceptance of its project by the project beneficiaries according to the voting procedures outlined below and in Sections 31.5.4.~~2.6~~4, 31.5.4.5, and 31.5.4.6 of Attachment Y through a request in writing to the NYISO. Once such a request is received by the NYISO, the results of the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation shall be posted on the NYISO website.

In the event that the NYISO finds, through the ~~Benefit/Cost Analysis, finds~~Economic Transmission Project Evaluation, that a project is not eligible for cost allocation and recovery ~~under~~ as described in Section ~~3~~31.5.4 of Attachment Y ~~(i.e., the benefit of the proposed project exceeds its cost measured over the first ten years from the proposed commercial operation date for the project, and the total capital cost of the project exceeds $25 million),~~ then the NYISO shall provide the ~~developer's~~Developer's written notification of the results and that the ~~Benefit/Cost Analysis Request~~Economic Transmission Project Evaluation has been deemed withdrawn.

In the event that the ~~developer~~Developer either (1) withdraws its ~~Benefit/Cost Analysis Request~~Economic Transmission Project Evaluation in accordance with the foregoing section or (2) the ~~developer's Benefit/Cost Analysis Request~~Developer's Economic Transmission Project Evaluation request is deemed withdrawn pursuant to this section, then the results of the ~~Benefit/Cost Analysis~~Economic Transmission Project Evaluation shall not be disclosed or posted on the NYISO website.

3.4.4. Procedure for Project Cost Overruns

The Developer is required to provide as part of the ~~project~~ proposal for a Regulated Economic Transmission Project, a firm price, as well as a risk profile to address project cost overruns. The risk profile will address at a minimum the following areas:

- The stage of project development and the level of accuracy of the project cost estimate;
- Required cost overruns sharing, if any, between the Developer and the LSEs benefiting from the project;
- Required project cost increase sharing, if any, between the Developer and the LSEs benefiting from the project due to a force majeure; and
- Identification of conditions, if any, for canceling the project by the Developer including terms and conditions for allocating sunk costs and lost benefits.

The Developer may submit multiple risk profiles for the project. The project and each of its risk profiles

will be voted on individually by the LSE's benefiting from the project as if it was a separate project.

The rule for project cost overruns is provided Section 31.5.~~3~~4.4.5.3 in Attachment Y to the OATT.

3.4.4.1. Quarterly Reporting

Upon acceptance of the ~~project~~Regulated Economic Transmission Project and an associated risk profile by the LSEs benefiting from the project, the Developer will provide to the LSEs benefiting from the project with quarterly project updates to include but not be limited to the following:

- project's current status
- updated milestone schedule
- updated cash flow
- a project cost analysis, and
- an explanation for any schedule or cost changes.

Simultaneously, the ~~developer~~Developer will provide a copy of the report to the NYISO, which the NYISO will post on its website.

The project cost analysis will include the original estimated costs, the actual costs spent to date, the estimated cost to complete, and the percent change. A change ~~which~~that results in an increase in the project cost will be provided by the Developer to the LSEs benefiting from the project with a copy to the NYISO as soon as the change is discovered. (The Developer is not to wait until the next quarterly report to notify the LSEs benefiting from the project and the NYISO of the change).

3.4.5. Voting Procedure for Regulated Economic Transmission Projects

~~This section describes the process by which the potential transmission project's~~Potential beneficiaries ~~are~~of a Regulated Economic Transmission Project will be drafted and finalized and the vote ~~is~~ administered. The voting rules for ~~regulated economic transmission projects~~Regulated Economic Transmission Projects are provided in Sections 31.5.~~3~~4.4, 31.5.4.5 and 31.5.~~3~~4.6 in Attachment Y to the OATT

3.4.5.1. Identification of Beneficiaries and Voting Shares

The NYISO will develop the specific list of voting entities pursuant to Section 31.5.~~3~~4.4 of Attachment Y and deliver them to the ESPWG for comment. Voting beneficiaries will be Load Serving Entities (LSEs) in those ~~load zones~~Load Zones which will experience net benefits measured over the first ten years from the ~~project's~~Regulated Economic Transmission Project's proposed commercial operation date. The ESPWG will, at its first meeting following the receipt of the list, begin reviewing and commenting on the list as presented. Following review and comment by the ESPWG, the final beneficiary list shall be submitted to

the BIC and subsequently to the MC for review and comment by Market Participants. Finally, the beneficiary list, the project benefit/cost analysis, and the comments made by Market Participants at the BIC and the MC shall be submitted to the NYISO Board when this matter is brought to the Board for its consideration and approval.

Upon the ESPWG review of the beneficiary list and the benefit/cost analysis, the NYISO will provide each voting beneficiary with the information on its own voting shares, project benefit/cost analysis, and the Project Conceptual Package, as described above in Section 3.4.3 of this Manual. The NYISO will not provide an LSE's voting share information to other voting beneficiaries and will treat that information as Confidential Information under the NYISO Code of Conduct (OATT Attachment F~~;~~ Services Tariff Article 6).

The NYISO will hold an informational session for voting beneficiaries soon after the results of the project benefit/cost analysis and beneficiary determination are reviewed by the ESPWG and delivered to voting beneficiaries, and prior to the BIC meeting.

Following the review and comment on the beneficiary list by Market Participants at the BIC and MC meetings, the LSEs may submit comments on their respective voting shares directly to the NYISO Board of Directors. In addition, any Market Participant or interested party may submit comments on the final beneficiary list and the project benefit/cost analysis to the Board. The Board will review such comments, including requests for oral arguments, prior to Board approval of the voting shares, which will take place prior to the beneficiary vote on the specific project.

The Board may approve the benefit/cost analysis and beneficiary designations as submitted or propose modifications on its own motion. If any changes are proposed by the Board, the revised benefit/cost analysis and beneficiary designations shall be returned for comment by Market Participants at the Management Committee and by affected LSEs. The Board shall not make a final determination on the project benefit/cost analysis and beneficiary designation until it has reviewed the comments made by Market Participants at the Management Committee and by affected LSEs. Upon final approval of the Board, the project benefit/cost analysis and the beneficiary list shall be posted by the NYISO on its website and shall form the basis of the beneficiary voting described in Section 31.5.~~3~~4.6 of Attachment Y.

3.4.5.1.1. Procedural Details

- For purposes of this procedure, the Notice Date shall be defined as the date the required voting material is sent to the voting entities for the special voting meeting.
- For purposes of this procedure, LSEs shall be defined in accordance with the tariff as those LSEs that benefit from a project pursuant to Section 31.5.~~3~~4.4.2.
- Zonal benefit, zonal cost allocation, and other terms and formulas related to this procedure are discussed in the procedures for Sections 31.5.~~3~~4.4.2 (calculation of Zonal Benefit), 31.5.~~3~~4.4.3

(addressing load zones not benefiting from a proposed project) and 31.5.~~3~~4.4.4 (allocation of project costs to the load).

- Weighted zonal voting share of each LSE = (Zonal Benefits / Total Zonal Benefits for zones with positive net benefits) * (LSE Zonal MWh/Total Zonal MWh).
- If a Load Serving Entity benefits in more than one zone, the formula will be calculated for each zone of benefit and the total voting share of the Load Serving Entity will be the sum of such calculations.
    - The total voting share of each LSE = sum of the weighted zonal voting shares for each LSE.
    - The total voting share of each LSE will be calculated to seven decimal places with rounding.
    - The sum of all total LSE voting shares must equal 1.

3.4.5.1.2. Methodology for Calculation of LSE Zonal MWh Load Data

For purposes of this calculation, the NYISO will use the most recent rolling 12-month settlement data (Hourly Billing Metered Load MWh data) calculated using the most recent month for which actual metered load data is available pursuant to the metering timelines in Section 2.7.4.2 to the OATT and Section 7.4.1 of the MST (90 day true-up). The LSEs' MWh data used for this calculation will be from the first available actual metered month at the time of the study and the prior 11 months.

Each LSE's load share will be calculated as the ratio of that LSE's MWh to total load MWh (in zones that will benefit from the project), for the rolling 12-month period data being used.

LSE load shifts that occur within the rolling 12-month period data being used shall be treated as follows:

- If an LSE has no billing metered data in the last billing month of the rolling 12-month period data being used, that LSE's load and voting weight will be removed from the calculation.
- If a new LSE joins a zone anytime during the rolling 12-month period data being used, that LSE's load share will be calculated as the ratio of that LSE's MWh to total 12-month zonal load MWh.

Voting shares will be assigned to the LSEs. The billing organization may be a proxy for an LSE within that billing organization if that LSE decides to be represented by its billing organization to cast the vote. As such, that billing organization will be responsible for collecting and forwarding to the NYISO proper authorization for that LSE's load.

3.4.5.1.2.1. Changes in LSE Loads

After the Board approval of the beneficiary determination, the NYISO will examine its billing data to determine if changes have occurred in LSE registrations and load served in the NYCA. At least thirty days before the vote, the NYISO will re-run the calculation to determine if any LSE load has been changed by 10% or more (of its own load). If a change in any LSE load of 10% or more for an individual LSE occurs

after the Board approval and before the Notice Date, the NYISO will update the calculation before the date of the actual vote and will notify each LSE in accordance with NYISO notification procedure provided herein of their updated voting shares at least five business days before the date of the vote.

3.4.5.1.2.2. LSE Education

The NYISO will reach out to LSEs or, if they so designate, their designated proxy Billing Organizations, sufficiently in advance of the scheduled voting date in order to inform them and educate them about the ~~CARIS~~Economic Transmission Project Evaluation voting process.

3.4.5.1.3. Beneficiary Voting Procedure

For a ~~regulated economic transmission project~~Regulated Economic Transmission Project to have its cost allocated under Section 31.5.~~3~~4.6.3 in Attachment Y to the OATT, eighty (80) percent or more of the actual votes cast on a weighted basis must be cast in favor of implementing the project. If less than 80% of the LSE votes are cast in favor of implementing the project, the project will be deemed to be rejected. Abstentions and absentees will not be counted as votes cast. If no LSE votes are cast on a proposed project, the project will be deemed to be rejected.

For regulated economic projects, the procedure for tallying the vote is governed by Section 31.5.~~3~~4.6.5.

3.4.5.1.3.1. Details

- Voting will occur at a special voting meeting chaired by the BIC Chair. The BIC Chair will oversee the voting.
- Upon finalization of the specific list of voting beneficiaries, the BIC Chair, supported by the NYISO, will send voting materials related to the particular project by electronic mail directed to the Member Relations main contact, billing contact (as applicable) and the MC representative (as applicable) of each voting entity of the related specific list. Voting materials related to a particular project will include the time, date, location and telephone dial-in information of the voting session, as well as the Project Conceptual Package, as defined in ~~Regulated Economic Projects Specific Project Submittals Procedure~~Section 3.4.3 of this Manual, to be voted on, the Board-approved project benefit/cost analysis and specific list of voting beneficiaries, and for that particular LSE, the calculations of the weighted voting share.
- No voting session shall take place earlier than five business days following the distribution by the BIC Chair, supported by the NYISO, of voting materials related to the project to be voted on.
- If multiple projects are presented for voting at the same voting session, projects will be voted upon in descending order based on their benefit/cost ratio; the project with the largest benefit/cost ratio will be voted on first:
    - The LSEs voting on each project will vote beginning at that point in the alphabetical order determined by lottery conducted prior to each project vote.
    - The voting results of each project will be announced directly after the voting of each project.
- Prior to each vote, the NYISO will present the project and voting materials.
- Votes will be taken by roll call from the specific list of voting beneficiaries.

- Voice votes can be cast in person or by telephone during the voting session.
- LSEs voting against the project must submit in writing to the NYISO their rationale for their vote within 30 days of the date the vote is taken. LSEs must state the specific reasons for a vote against a project, including the metrics used in making their decision to oppose a project and how those metrics were used.
- The NYISO will record the vote, and will calculate and report the results of the vote. The Chair of the BIC will announce the results of the vote.
- The results of the vote shall be posted on the NYISO's website.

4. ADDITIONAL CARIS STUDIES

The rules governing Additional CARIS Studies are provided in Sections 31.3.1.2.3 and 31.3.1.2.4 in Attachment Y to the OATT.

Applicability

- To requests for additional congestion and resource integration studies ("Additional CARIS Studies") pursuant to Attachment Y of the NYISO OATT
- Not Applicable to:
  - Requests for firm point-to-point transmission service under Section 3.7 of the OATT;
  - Requests for firm Network Integration Transmission Service pursuant to Section 4.5 of the OATT;
  - Interconnection requests under Attachment X, Z or S of the OATT;
  - Requests for evaluation of projects as potential reliability solutions to an identified Reliability Need.

Eligibility

- Any NYISO Market Participant or other interested party ("Requestor") is eligible to request Additional CARIS Studies.
- Requestor is responsible for all reasonable actual costs incurred by the NYISO for Additional CARIS Studies. Such costs may include the use of contractors/consultants assistance at the NYISO's discretion, and costs that TOs may incur to supply study-related data when requested to do so by the NYISO.

Posting of Requests for Additional CARIS Studies

- NYISO will post the requests for Additional CARIS Studies on its Website.
- Postings shall include a general description of the study requests, the date of receipt, and the identity of the Requestor.
- Provision shall be made to allow combination/cost sharing of identical/similar or overlapping study requests from different parties if the parties agree.
- Results of these Additional CARIS Studies will be treated as Confidential Information under Attachment F to the OATT;
  - However, if a Requestor should seek regulated cost recovery under the NYISO OATT, Attachment Y, Section 31.4.3.3 and the approved procedures for Regulated Economic Projects – Specific Project Submittals, the Requestor may elect to post results of its Additional CARIS Studies on the NYISO website at that time;
  - If the Requestor elects to post the results of Additional CARIS Studies, the posting will note whether the database and base case assumptions (collectively "Study Assumptions") used in the study are different from the Study Assumptions that are required for seeking regulated cost recovery under the CARIS Phase 2.

Timing of Requests for Additional CARIS Studies

- The NYISO shall, upon request, subject to resource limits, conduct an Additional CARIS Study at any time during the year.
  - The NYISO will accommodate all study requests to the extent reasonable and practicable, subject to resource limitations.

- The Additional CARIS Study shall use the database and base case assumptions in the scope agreed upon by the Requestor and the NYISO.

Request for Additional CARIS Studies

- Requestor shall submit a "Request for Additional CARIS Study" using a form developed by the NYISO which requires specific information needed to conduct the study.
- Each study request must be accompanied by a refundable deposit of $25,000, which deposit shall be applied toward the reasonable actual costs incurred by the NYISO, and its contractors, in the performance of the study.
- Multiple study requests involving diverse locations system shall each be required to submit a separate request and a separate deposit.

Scoping Meeting

- NYISO shall acknowledge receipt of the Request for Additional CARIS Study within ten (10) business days of receipt and shall inform Requestor whether its request is complete in the judgment of the NYISO. If not complete, the NYISO will request additional information.
- Following the receipt of a complete Request for Additional CARIS Study, the NYISO shall establish with Requestor a mutually agreeable time for a Scoping Meeting.
- The Scoping Meeting shall be used to determine the nature of the study to be conducted, including any customization that the Requestor may desire for its study, such as:
  - Additional metrics for measuring congestion and the benefits of relieving that congestion.
  - Additional scenarios and the assumptions to be used for each.
  - Whether the Requestor wants the NYISO to analyze potential transmission, generation and/or demand response solutions, and the characteristics of those solutions.
  - Degree of certainty requested for the solution cost estimates.
- Following the Scoping Meeting, the NYISO will memorialize the results in writing as part of a Study Agreement for an Additional CARIS Study (developed by the NYISO) to be provided to the Requestor along with a non-binding estimate of the total study costs.
  - The Study Agreement will include the scope of work and will define the deliverables to be provided by the NYISO at the completion of the studies.
  - The Study Agreement will also contain payment terms and conditions.
  - Additional deposits shall be required to cover the NYISO's estimate of the total study costs (after credit for the initial deposit).
  - The Study Agreement must be executed by the Requestor before the NYISO conducts any study work.
  - If Requestor modifies the scope of the Additional CARIS Study as initially specified, and does so in such a way as to increase the estimated total cost of the Additional CARIS Study, the NYISO may request, and the Requestor shall pay, an additional deposit to reflect that cost increase, which the NYISO shall also apply to the actual cost of the Additional CARIS Study.

Completion and Delivery of Study Results

- The NYISO will process the Additional CARIS Studies in the order in which they are received. A study will be deemed received by the NYISO on the date the NYISO receives the completed study request form and acceptable deposit.

- ~~The NYISO will use reasonable efforts to complete each Additional CARIS Study by a date mutually agreed to with the Requestor. If the NYISO determines this target date will not be met, the NYISO will promptly inform the Requestor and provide the Requestor with an updated estimate of the new date by which the Additional CARIS Study will be completed.~~
- ~~Upon completion of the study, the NYISO will provide a final invoice to the Requestor to cover all reasonable costs it has incurred in the performance of the study.~~
- ~~Within 30 days of the final invoice, there shall be a final payment (refund) to true up any study deposits to the final study cost.~~
- ~~Following final payment (refund), the NYISO will provide the study results to the Requestor.~~
- ~~Upon request, the NYISO will schedule a meeting to review the study results with the Requestor.~~

~~Withdrawal of Request~~

- ~~Requestor may withdraw its study request at any time by written notice to the NYISO.~~
- ~~Upon receipt of such request, the NYISO will immediately terminate any further study work.~~
- ~~Requestor shall reimburse the NYISO for all reasonable expenses incurred prior to the receipt of the withdrawal notice. NYISO will refund any unpaid deposit funds to the Requestor, if applicable.~~
- ~~Following reimbursement (refund), the NYISO will forward the results of any study work completed prior to the withdrawal date to the Requestor.~~

4. Requested Economic Planning Studies (REPS)

A Market Participant or any other interested party may, at any time, request that the NYISO perform a study separate from and in addition to the System & Resource Outlook at the requesting party's sole expense and solely for informational purposes. The scope and deliverables for the Requested Economic Planning Study will be agreed upon by the NYISO and the requesting party. The rules governing Requested Economic Planning Studies are established in Section 31.3.3 in Attachment Y to the OATT. The Requested Economic Planning Study Request Form and the Study Agreement for a Requested Economic Planning Study are located in Sections 31.13 and 31.14 in Attachment Y of the OATT.

5. PROCEDURE FOR STUDY REPLICATION

~~The~~ Section 5 of this Manual establishes the rules governing study replication ~~are~~ provided for in Sections 31.2.3.1, 31.2.~~6~~7.1, 31.3.~~2~~1.8.1, 31.5.4.5.1, and 31.~~5.3.5~~4.11.1 of Attachment Y to the OATT.

PROCEDURE

Applicability and Eligibility

- Any NYISO Market Participant or other interested party ("Requestor") is eligible to request replication of the following studies: (1) the Reliability Needs Assessment, (2) Comprehensive Reliability Plan, (3) ~~CARIS Phase 1, and (4) CARIS Phase 2.~~System & Resource Outlook, (4) the benefit/cost analysis and beneficiary determination in the Economic Transmission Project Evaluation, and (5) Public Policy Transmission Planning Report.
- Requestor is responsible for all reasonable costs incurred by the NYISO for Study Replication. Such costs may include, at the NYISO's discretion, the costs for use of contractors/consultants to assist in the completion of the Study Replication, and the reasonable costs that New York Transmission Owners may incur to supply study-related data when requested to do so by the NYISO.

Confidentiality

- The NYISO will treat a request for Study Replication as Confidential Information under Attachment F to the OATT.
- Results of Study Replication will be treated as Confidential Information under Attachment F to the OATT.
- The NYISO will ensure that the Scope of Study Replication is not designed in a way which will produce results that could be used to divulge confidential information.

Timing of Requests for Study Replication

- The NYISO shall, upon request, and subject to resource limits, promptly respond to study requests.
    - The NYISO will accommodate all Requests for Study Replication subject to resource limitations.

Request for Study Replication

- Requestor shall submit a "Request for Study Replication" using ~~a~~the request form ~~developed by the NYISO~~in Appendix F of this Manual, which requires specific information needed to conduct the study.
- Each request must be accompanied by a refundable deposit of $25,000, which deposit shall be applied toward the reasonable costs incurred by the NYISO.
- NYISO will post the requests for Study Replication on its website.
- Postings shall include a general description of the study requests, the date of receipt, and the identity of the Requestor.

Scoping Meeting

- NYISO shall acknowledge receipt of the Request for Study Replication within ten (10) business days of receipt and shall inform Requestor whether, in the judgment of the NYISO, the request is complete. If not complete, the NYISO will request additional information.
- Following the receipt of a complete Request for Study Replication, the NYISO shall establish with Requestor a mutually agreeable time for a Scoping Meeting at which the Study Replication scope will be determined.
- Following the Scoping Meeting, the NYISO will prepare a Scope of Study Replication to become part of a Study Agreement for a Study Replication ~~(developed by the NYISO) that~~, which agreement form is set forth in Appendix G of this Manual, which will be provided to the Requestor along with a non-binding estimate of the total study costs.
    - The ~~Scope~~scope of the Study Replication will define the deliverables to be provided by the NYISO at the completion of the studies and will include identification of the study to be replicated as specified in applicable Section(s) 31.2.3.1,31.2.~~6~~7.1, 31.3.~~2.~~1.8, 31.5.4.5.1, and/or 31.~~5.3.5~~4.11.1 of Attachment Y, and data to be analyzed.
    - The Study Agreement will also contain payment terms and conditions.
    - Additional deposits shall be required to cover the NYISO's estimate of the total study costs (after credit for the initial deposit).
    - The Study Agreement must be executed by the Requestor and the NYISO before the NYISO conducts any study work.
    - If Requestor modifies the scope of the Study Replication as initially specified, and does so in such a way as to increase the estimated total cost of the Study Replication, the NYISO may request, and the Requestor shall pay, an additional deposit.

Completion and Delivery of Study Results

- The NYISO will conduct the Study Replication in the order in which requests for Study Replication are received. A request will be deemed received by the NYISO on the date the NYISO receives all necessary components of a complete request, including the deposit.
- The NYISO will use reasonable efforts to complete each Study Replication by a date mutually agreed to with the Requestor. If the NYISO determines this target date will not be met, the NYISO will promptly inform the Requestor and provide the Requestor with an updated estimate of the new date by which the Study Replication will be completed.
- Upon completion of the study, the NYISO will provide a final invoice to the Requestor to cover all reasonable costs it has incurred in the performance of the study.
- Within 30 days of the final invoice, there shall be a final payment (refund) to true up any study deposits to the final study cost.
- Following final payment (refund), the NYISO will provide the study results to the Requestor.
- Upon request, the NYISO will schedule a meeting to review the study results with the Requestor.
- The NYISO will review the results of the Study Replications to determine whether the results reveal Confidential Information that is not subject to disclosure under the NYISO's Code of Conduct. Confidential Information will be removed or the results aggregated or masked sufficiently to avoid the disclosure of Confidential Information.

Withdrawal of Request

- Requestor may withdraw its study request at any time by written notice to the NYISO.
- Upon receipt of such request, the NYISO will terminate any further study work.
- Requestor shall reimburse the NYISO for all reasonable expenses incurred prior to the receipt of the withdrawal notice. The NYISO will refund any unpaid deposit funds to the Requestor, if applicable.

Appendix A Typical ~~CARIS Base Case~~ Assumptions Matrix

The Typical ~~CARIS Base Case~~System & Resource Outlook Assumptions Matrix is available under the *Economic Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:

https://www.nyiso.com/manuals-tech-bulletins-user-guides

Appendix B ~~Additional CARIS Study~~ Reserved.

Appendix C Reserved.

Appendix D Request Form for Economic Transmission Project Evaluation (ETPE) of a Regulated Economic Transmission Project

~~The Additional CARIS Study~~The Economic Transmission Project Evaluation Request Form is available under the *Economic Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:

https://www.nyiso.com/manuals-tech-bulletins-user-guides

Appendix ~~C Additional CARIS Study~~E Economic Transmission Project Evaluation (ETPE) Agreement Form

~~The Additional CARIS Study Agreement Form is available under the *Economic Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:~~

~~https://www.nyiso.com/manuals-tech-bulletins-user-guides~~

~~Appendix D Specific Project Submittal Request Form~~

~~The Specific Project Submittal Request Form is available under the *Economic Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site: https://www.nyiso.com/manuals-tech-bulletins-user-guides~~

~~Appendix E Specific Project Submittal Agreement Form~~

~~The Specific Project Submittal~~The Economic Transmission Project Evaluation (ETPE) Agreement Form is available under the *Economic Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:

https://www.nyiso.com/manuals-tech-bulletins-user-guides

Appendix F Study Replication Request Form

The Study Replication Request Form is available under the *Economic Reliability Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:

https://www.nyiso.com/manuals-tech-bulletins-user-guides

Appendix G Study Replication Agreement Form

The Study Replication Agreement Form is available under the *Economic Reliability Planning Process Manual* which is located in the Manuals>Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:

https://www.nyiso.com/manuals-tech-bulletins-user-guides

~~Appendix H NYISO Developer Qualification Form~~

~~The NYISO Developer Qualification Form is available under the *Reliability Planning Process Manual* which is located in the Manuals > Planning folder on the NYISO Manuals, Technical Bulletins & Guides Web site:~~

~~https://www.nyiso.com/manuals-tech-bulletins-user-guides~~